



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,062	01/04/2002	Stephen A. Milks	8416-000008	5754

7590 06/02/2004
W. R. Duke Taylor
Harness, Dickey & Pierce, P.L.C
P.O. Box 828
Bloomfield Hills, MI 48303

EXAMINER

GRAY, MICHAEL KUHN

ART UNIT PAPER NUMBER

3746

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,062	Applicant(s) MILKS, STEPHEN A.	
	Examiner Michael K. GRAY	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-11,13-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 9 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,10,11,13-16 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Background

1) This Office Action is in response to the Amendment received March 2, 2004.

Claim Rejections - 35 USC § 102

2) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Goyetche (6,440,190).

With regard to claim 1, Goyetche teaches an air circulation device having a housing assembly having a front face portion 150 (Figure 1A) and a rear face portion 119. A base portion or region extends between the front and rear face portions and includes a housing body 102. The base portion includes a motor 104 and fan blades 108. A rigid casing 106, 107 seals the motor and associated motor bearings creating a liquid impermeable seal that allows the air circulation device to be subjected to liquids for cleaning the fan blades while preventing corrosion and damage due to liquid. The bottom of the housing body 102 includes an elongated support portion. At least a portion of the motor at the rear and front of the motor appear to be flat.

Art Unit: 3746

The casing has a thickness covering the motor so that the motor has a low profile, i.e. cannot be seen through the rigid casing. (Applicant has not described elementally what provides a "low profile").

Claim Rejections - 35 USC § 103

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyetche (6,440,190).

Although Goyetche teaches the casing and motor of claim 1, it does not teach the material the casing is made of.

Claim 5 states that the casing is made of a rigid, non-corrosive material. In that the motor casing of Goyetche is to be subjected to damp, moisture containing air, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the motor casing of a non-corrosive material (e.g., stainless steel or hard plastic) to promote a longer work-life for the casing.

Claim 6 claims the device, excluding the motor and casing, is made of a polymeric material. In that plastics have been utilized in fan housings due to their sturdy, light-weight and low-cost construction, it would have been obvious to one of ordinary skill in the art to utilize a fan housing made of a polymeric material to economically prevent corrosion and to reduce the weight of the fan housing and associated elements.

Claims 1, and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al. (5,232,090) in view of Goyetche (6,440,190).

Raab et al. teaches a housing assembly which includes a front face portion (front grill), a main base portion 11, 12, 13 and a back face portion (rear grill). The base portion includes a motor 15 and a fan blade. The motor necessarily has a motor casing and is relatively flat.

A base portion includes a bottom face 11 having elongated support members 19, 20 that are capable of being pivotably disposed in an extended position or a contracted position as a result of their being mounted by a pivot pin.

In that Goyetche teaches a sealed motor box 106, including seals 107 which protect the fan motor from contaminants, it would have been obvious for one of ordinary skill in the art to provide the Raab et al. fan motor with a sealed casing to protect the fan motor from moisture and contaminants and to prolong the life of the fan motor.

In that the support members of Raab et al. are attached to the box frame at one location (i.e., the location of pin 21), one of ordinary skill in the art would have considered it as obvious that the support members could be secured to the box frame in various angular positions by rotating the support member on the pin and fastening the support member at a desired location. Further, the applicant in claim 8 does not provide structure which allows the support portion to be pivoted and secured at a desired location.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable Goyetche (6,440,190) in view of Hung (5,839,205).

The air circulation device claimed in claim 1 is demonstrated by Goyetche; however, Goyetche does not teach a fan motor which is powered by a DC power source.

Hung demonstrates an air circulation device having a housing in which is located a motor and a fan blade. The motor of the fan is powered by a 12-volt direct current power source such as provided by the cigarette lighter socket of an automobile.

In that DC operated fans have been used to provide air circulation at locations that are positioned away from an AC power source, it would have been obvious to power a motor enclosed in a sealed casing (such as the motor or Goyetche) with a DC power source so that the fan could be used in various locations and not be dependent on a home-based AC power source.

Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al. (5,232,090).

Raab et al. teaches a housing assembly which includes a front face portion (front grill), a main base portion 11, 12, 13 and a back face portion (rear grill). The base portion includes a motor 15 and a fan blade. The motor necessarily has a motor casing. A base portion includes a bottom face 11 having elongated support members 19, 20 that are capable of being pivotably disposed in an extended position or a contracted position as a result of their being mounted by a pivot pin that provides a fastening means. Further, the concept of a pivot pin renders obvious that the support member could be positioned in an intermediary position by manual means.

In that the support members of Raab et al. are attached to the box frame at one location (i.e., the location of pin 21), one of ordinary skill in the art would have considered it as obvious that the support members could be secured to the box frame in various angular positions by rotating the support member on the pin and fastening the support member at a desired location. Further, the applicant in claim 10 does not claim structure which allows the support portion to be pivoted and secured at a desired location.

Art Unit: 3746

As for claim 19, it would have been obvious to make the box fan of Raab et al. about three inches thick. The applicant does not provide an explanation of the specific unexpected benefit that would be provided by making the fan three inches thick. Accordingly, the thickness of the fan would be considered an obvious design choice.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al. (5,232,090) in view of Hung (5,839,205).

Raab et al. substantially demonstrates the invention claimed in claim 10, but do not teach a motor driven by a DC power source.

Hung demonstrates an air circulation device having a housing in which is located a motor and a fan blade. The motor of the fan is powered by a 12-volt direct current power source such as provided by the cigarette lighter socket of an automobile.

In that DC operated fans have been used to provide air circulation at locations that are positioned away from an AC power source, it would have been obvious to power a fan motor, such as the Raab et al. fan motor, with a DC power source so that the fan could be used in various locations and not be dependent on a home-based AC power source.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al. (5,232,090) in view of Goyetche (6,440,190).

Raab et al. substantially teaches the invention claimed in claim 10, but does not demonstrate the elements claimed in claims 13-16.

As for claims 13-16, Goyetche teaches a fan motor sealed in a rigid casing for protection against contaminants, etc. In that the prolonged life of a fan motor is a desirable feature, it would have been obvious to use a sealed, rigid fan motor casing, as disclosed by Goyetche with the fan disclosed in Raab et al. to prolong the life of the fan. In that prolonging the life of the fan motor is a desirable feature, it would have been obvious to make the casing of a non-corrosive, impermeable material to protect the fan motor from moisture and extend the life of the motor, and it would have been obvious to make the fan housing and associated elements, other than the motor and casing) of a polymeric material to provide an inexpensive, durable and light weight material for the motor housing.

Allowable Subject Matter

4) As was indicated in the previous Office Action, Claims 9 and 18 would appear to contain allowable subject matter in that the claimed elongated support portion which is secured by a knob and a dimple would not appear to be demonstrated in the prior art. Accordingly, claims 9 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant has argued that Goyetche requires the fan to be dismantled in order to clean the fan blades; however, applicant has not utilized claim language that would distinguish claim 1 over Goyetche.

Applicant has argued that the intermediary-position language of claim 10 is not demonstrated by Raab. However, one of ordinary skill in the art would have considered it as obvious that the support members could be secured to the box frame in various angular positions by rotating the support member on the pin and fastening the support member at a desired location.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Gray whose telephone number is (703) 308-6196.

If the examiner does not answer the phone, a message will be provided as to when he will be in the Office. A message may be left on the examiner's voice mail.

The examiner's supervisor Justine Yu can be reached at (703) 308-2675.

The Official Fax number is (703) 872-9306.

Any inquiry of a general nature should be directed to the receptionist whose telephone number is (703) 308-0861.

/Michael K. Gray
Patent Examiner
Art Unit 3746


JUSTINE R. YU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

5/31/04